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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,624	02/19/2002	Yoko Kumagai	62807-040	9550
20277	7590	10/29/2007	EXAMINER	
MCDERMOTT WILL & EMERY LLP			DOAN, TRANG T	
600 13TH STREET, N.W.			ART UNIT	
WASHINGTON, DC 20005-3096			PAPER NUMBER	
			2131	
			MAIL DATE	
			DELIVERY MODE	
			10/29/2007	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/076,624

Applicant(s)

KUMAGAI ET AL.

Examiner

Trang Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on 08/14/2007.
2. Claim 11 has been amended.
3. Claims 1-11 have been canceled.
4. Claim 21 has been added.
5. Claims 11-21 are pending for consideration.

Response to Arguments

6. Applicant's arguments filed 08/14/2007 have been fully considered but they are not persuasive.

Applicant argues that Matsuyama does not teach or suggest, "a public key certificate including the contents signed by the registration authority, the signature to the contents signed by the registration authority, issuing contents to be issued by the issuing authority, and an issuing authority signature to the contents signed by the registration authority". Examiner respectfully disagrees. Matsuyama does teach a public key certificate including the contents signed by the registration authority, the signature to the contents signed by the registration authority, issuing contents to be issued by the issuing authority, and an issuing authority signature to the contents signed by the registration authority (see figure 16A and lines 24-39 of column 20 and lines 47-56 of column 21: Issuer Authority (1602) signs the contents of the certificate issuing request from the registration authority (i.e. Root RA) which includes registration authority's signature and the certified certificates. After signing the certificate issuing

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request of the registration authority, Issuer Authority transmits the generated public key certificate of the registration authority based on the registration authority's signature and the certified certificates, and its signature back to the registration authority (i.e. Root RA)).

The examiner is not trying to teach the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification. Therefore, the examiner asserts that cited prior art does teach or suggest the subject matter broadly recited in independent Claims 1 and 21, and in subsequent dependent Claims. Accordingly, rejections for claims 11-21 are respectfully maintained.

Claim Objections

7. Claim 11 is objected to because of the following informalities: let proceed to the first limitation "...a public key certificate and, and a certificate...", please correct to "...a public key certificate, and a certificate...". Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Examiner has maintained the art rejection in the previous office action by the foreign patent (EP 1130844), however a corresponding U.S. Patent (6990583) is applied in this application.

10. Claims 11-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuyama et al. (6990583) (hereinafter Matsuyama).

Regarding to claim 11, Matsuyama teaches generating, by the registration authority, a signature to contents to be registered with a public key certificate (Matsuyama: see figure 16A and lines 24-34 of column 20), and a certificate issuing request including both the contents signed by the registration authority and a signature to the contents signed by the registration authority (Matsuyama: see figures 16A and 19, column 3 lines 22-40 and column 22 lines 15-67 and column 23 lines 1-5); sending the certificate issuing request from the registration authority to the issuing authority (Matsuyama: see figure 16A and column 22 lines 64-67 and column 23 lines 1-5); generating, in response to the certificate issuing request by the issuing authority, a public key certificate including the contents signed by the registration authority, the signature to the contents signed by the registration authority, issuing contents to be issued by the issuing authority, and an issuing authority signature to the contents signed by the registration authority, the signature to the contents signed by the registration authority and the issuing contents issued by the issuing authority (Matsuyama: see figure 16A and lines 24-39 of column 20); and sending the public key certificate from the

issuing authority to the registration authority for being registered within the registration authority (Matsuyama: see figure 16A and lines 24-39 of column 20).

Regarding to claim 12, Matsuyama teaches wherein the contents signed by the registration authority is a predetermined identifier to specify information to be certified by the public key certificate of the end entity (Matsuyama: see figure 2, column 11 lines 18-42).

Regarding to claim 13, Matsuyama teaches wherein the contents signed by the registration authority is a hash value calculated by applying a hash function to information to be certified by the public key certificate of the end entity (Matsuyama: column 2 lines 30-45 and column 16 lines 1-67 and column 22 lines 31-67 and column 23 lines 1-5).

Regarding to claim 14, Matsuyama teaches verifying, by a verifying party, the issuing authority signature with the contents signed by the issuing authority; and verifying, by the verifying party, the registration authority signature with the contents signed by the registration authority included in the public key certificate (Matsuyama: column 17 lines 5-46 and column 3 lines 22-40 and column 22 lines 15-67 and column 23 lines 1-42).

Regarding to claim 15, Matsuyama teaches acquiring, by a verifying party, information signed by the registration authority according to the identifier in the public key certificate (Matsuyama: column 16 lines 1-67 and column 17 lines 1-46 and column 3 lines 22-40 and column 22 lines 15-67 and column 23 lines 1-42); calculating, by the verifying party, a hash value of the acquired information (Matsuyama: column 1 lines

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29-45 and column 16 lines 1-67 and column 17 lines 1-46 and column 23 lines 5 -42); decoding, by the verifying party, the registration authority signature included in the public key certificate, by using a public key of the registration authority (Matsuyama: column 16 lines 1-67 and column 17 lines 1-46 and column 23 lines 5-42); and checking by the verifying party, whether the hash value is identical to the decoded value (Matsuyama: column 16 lines 1-67 and column 17 lines 1-46 and column 23 lines 5-42).

Regarding to claim 16, Matsuyama teaches calculating, by a verifying party, a hash value of the information signed by the registration authority in the public key certificate (Matsuyama: column 1 lines 29-45 and column 16 lines 1-67 and column 17 lines 1-46 and column 23 lines 5 -42); decoding, by the verifying party, the registration authority signature included in the public key certificate, by using a public key of the registration authority; and checking by the verifying party, whether the hash value is identical to the decoded value (Matsuyama: column 16 lines 1-67 and column 17 lines 1-46 and column 22 lines 15-67 and column 23 lines 5-42).

Regarding to claim 17, Matsuyama teaches constructing and verifying, by the verifying party, a path from the certificate authority trusted by the verifying party, up to the public key certificate (Matsuyama: see figure 17, column 20 lines 54-67 and column 21 lines 1-65); verifying, by the verifying party, the registration authority signature described in the public key certificate using the public key of the registration authority (Matsuyama: see figure 17, column 20 lines 54-67 and column 21 lines 1-65); and constructing and verifying, by the verifying party, a path from the certificate authority

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trusted by the verifying party up to the public key certificate of the registration authority (Matsuyama: see figure 17, column 20 lines 54-67 and column 21 lines 1-65).

Regarding to claim 18, Matsuyama teaches wherein the verifying party obtains the public key certificate of the registration authority from a public key certificate database of the issuing authority according to the registration authority name described on the public key certificate (Matsuyama: see figure 17, column 20 lines 54-67 and column 21 lines 1-65).

Regarding to claim 19, Matsuyama teaches wherein the verifying party obtains the public key certificate of the registration authority described in an extended region of the public key certificate to be verified (Matsuyama: column 22 lines 6-67 and column 23 lines 1-42).

Regarding to claim 20, Matsuyama teaches sending, by the registration authority, a certificate invalidation request to the issuing authority of the public key certificate of the registration authority (Matsuyama: see figures 22 and 23, column 25 lines 25-67 and column 26 lines 1-37); receiving, by the issuing authority, the certificate invalidation request (Matsuyama: see figures 22 and 23, column 25 lines 25-67 and column 26 lines 1-37); and invalidating, by the issuing authority, the public key certificate of the registration authority (Matsuyama: see figures 22 and 23, column 25 lines 25-67 and column 26 lines 1-37).

Regarding to claim 21, this claim has limitations that is similar to those of claim 1, thus it is rejected with the same rationale applied against claim 1 above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Perlman discloses the method of "efficient revocation of registration authorities" (US 2002/0099668).

b. Balaz et al discloses the method of "VPN enrollment protocol gateway" (US 6978364).

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang Doan whose telephone number is (571) 272-0740. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner
Art Unit 2131


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